

CLAIMS:

Please amend the claims as follows.

1. (Currently amended) A computer system comprising:
a plurality of server shelves, each server shelf having a carrier for removably receiving a plurality of information processing modules and a switching module, and an interconnection member for providing connections between the information processing modules and the switching module; and
a master shelf including a carrier for removably receiving a master switching module;
~~wherein the switching modules of the respective shelves are interconnected in a logical stacking configuration to form a logical stacking arrangement~~
wherein the server shelves are logically connected into a plurality of stacks, wherein the switching modules of the respective shelves in each stack are interconnected in a logical stacking configuration;
wherein the master switching module is connected into each stack as a common master switch for all of the stacks, wherein the master switching module is connected to the switching module of a first server shelf and to the switching module of a last server shelf in each of the stacks.
2. (Original) The computer system of claim 1, wherein the logical stacking configuration is a closed loop stacking configuration.
3. (Original) The computer system of claim 1, wherein one switching module within the computer system is operable as a master switching module.
4. (Original) The computer system of claim 3, wherein any switching module within the computer system is operable as the master switching module.

5. (Original) The computer system of claim 4, wherein only one switching module within the computer system operates as a master switch at any given time.

6. (Original) The computer system of claim 3, wherein all switching modules in the computers system other than the master switching module are operable as slave switching modules responsive to the master switching module.

7. (Cancelled)

8. (Currently amended) The computer system of claim ~~[[7]]1~~, ~~further comprising a system management module configured to provide system level management functionality to the shelves in the stacks, wherein each shelf is coupled to the system management module via a management connection~~ wherein the information processing modules are configured as server blades and are further configured as field replaceable units, and wherein the master switch module is also configured as a field replaceable unit.

9. (Currently amended) The computer system of claim ~~[[7]]1~~, further comprising a system management module coupled to the master switching module via one or more management connections, wherein the system management module is configured to provide system-level management functionality to the server shelves in the stacks via the master switching module.

10. (Currently amended) The computer system of claim 9, wherein the master switching module is configured to multiplex management information from the system management module in with data content transmitted to the server shelves via inter-shelf connections.

11. (Currently amended) The computer system of claim 1, wherein each server shelf comprises two switching modules removably received therein.

12. (Currently amended) The computer system of claim 11, wherein both switching modules of each server shelf are connected into a common logical stacking arrangement.

13. (Currently amended) The computer system of claim 11, wherein each switching module of each server shelf is connected into a different logical stacking arrangement to the other switching module of that shelf.

14. (Currently amended) The computer system of claim 13, wherein each server shelf is connected into two logical stacking arrangements, each switching module of the shelf being connected into a different one of the logical stacking arrangements, and wherein ~~the~~ each logical stacking ~~arrangements~~ arrangement provides equivalent connectivity between the server shelves as the other logical stacking arrangement.

15. (Currently amended) The computer system of claim 11, wherein each switching module of a given server shelf is operable to replicate the functionality of the other switching module of that shelf.

16. (Currently amended) The computer system of claim 11, wherein one switching module of each server shelf is operable as a shelf level master switching module and wherein the other switching module of that shelf is operable as a shelf level slave switching module.

17. (Currently amended) The computer system of claim 11, wherein each switching module of a given server shelf is interconnected with the other switching module of that shelf.

18. (Currently amended) The computer system of claim 1, wherein each server shelf comprises two switching modules removably received therein, wherein the server shelves are logically connected into a plurality of stacks, wherein the switching modules of the respective shelves in each stack are interconnected in at least one logical stacking configuration, wherein each stack includes two or more server shelves, wherein for each

stack the two switching modules removably received in at least one server shelf of the stack are interconnected with the two switching modules removably received in a separate server shelf of the same stack, wherein the computer system further comprises a master shelf including a carrier for removably receiving two master switching modules, wherein each of the master switching modules is connected into each stack as a common master switch for all of the stacks, ~~wherein the computer system further comprises a system management module configured to provide system level management functionality to the shelves in the stacks~~ a first of the master switching modules is connected to a first switching module of a first server shelf and to a first switching module of a last server shelf in each of the stacks, and wherein a second of the master switching modules is connected to a second switching module of a first server shelf and to a second switching module of a last server shelf in each of the stacks.

19. (Currently amended) The computer system of claim 1, wherein each server shelf ~~also~~ further comprises a service processor module for providing management functions in respect of said information processing modules.

20. (Currently amended) The computer system of claim 19, wherein each switching module of each server shelf comprises a service processor module.

21. (Previously presented) The computer system of claim 1, wherein each switching module comprises at least one forwarding element for performing a forwarding operation and a respective controlling element for controlling the switching element.

22. (Original) The computer system of claim 21, wherein each switching module comprises at least one switch fabric chip and a controlling microprocessor, and wherein the functionality of each forwarding element is performed by a switch fabric chip and the functionality of the controlling element is performed by the same switch fabric chip and the controlling microprocessor in combination.

23. (Original) The computer system of claim 21, wherein each controlling element is aware of the topography of the stack.

24. (Original) The computer system of claim 23, wherein each controlling element is operable to control the operation of the forwarding element to cause a unicast data element to be forwarded by its respective forwarding element using a shortest transmission path to its target.

25. (Original) The computer system of claim 23, wherein each controlling element is operable to control the operation of the forwarding element to cause a multicast or broadcast data element to be forwarded once around the stack in a given direction.

26. (Original) The computer system of claim 21, wherein each switching module is content aware.

27. (Original) The computer system of claim 26, wherein the controlling element is operable to study a transmitted data element to determine a path to destination based on the content of that data element.

28. (Currently amended) A computer system comprising:

a plurality of server shelves, each server shelf including a carrier for removably receiving a plurality of information processing modules and a switching module, and an interconnection member for providing connections between the information processing modules and the switching module;

wherein the server shelves are logically connected into a plurality of stacks, wherein the switching modules of the respective shelves in each stack are interconnected in a logical stacking configuration;

a master shelf including a carrier for removably receiving a master switching module, wherein the master switching module is connected into each stack as a common master switch for all of the stacks; and

a system management module coupled to the master switching module and to an external management network via a plurality of management connections, wherein the system management module is configured to provide system-level management functionality to the server shelves in the stacks via the master switching module.

29. (Cancelled)

30. (New) A server system comprising:

a plurality of server shelves, each server shelf having a carrier for removably receiving a plurality of information processing modules and a switching module, and an interconnection member for providing connections between the information processing modules and the switching module; and

a master shelf including a carrier for removably receiving a master switching module;

wherein the server shelves are logically connected into a plurality of stacks, wherein each stack includes two or more server shelves, wherein for each stack at least one switching module removably received in a server shelf of the stack is interconnected with at least one switching module removably received in a separate server shelf of the same stack;

wherein the master switching module is connected into each stack as a common master switch for all of the stacks, wherein the master switching module is connected to the switching module of a first server shelf and to the switching module of a last server shelf in each of the stacks.